

State of Montana
Department of Public
Instruction

Arbor Day Manual

"The Groves Were God's First Temples"

State Flower, The Bitter Root

"Lewisia Rediviva"



Arbor Day, April 16th, 1907



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F.E. Marshall.

THE BITTERROOT (LEWISIA REDIVIVA, PURSH).
THE STATE FLOWER OF MONTANA.

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INTRODUCTION.

Tree planting by students in our educational institutions and by the pupils of the public schools is fast becoming a national custom. The kind of trees best adapted to the soils and climatic conditions of Montana, when to plant trees, where to plant them, how to prepare the soil for them, and how to care for them, are all matters of growing interest to the children, citizens, trustees, and teachers in every school district of our state. The planting of class trees has long been a custom in many of the colleges, normal schools, and high schools, while the planting of class trees and grade trees has also become a custom in many of our rural schools.

Tree planting has taken strong hold upon all classes of people. It has become a matter of interest to many of our leading municipal authorities. The double lines of trees adorning and shading the sidewalks of the boulevards in many of our cities are the best indications of this interest. Tree planting, in fact, has only commenced in our country, and in the near future we predict that it will obtain the same hold upon our people that it has for scores of years held upon the people of European countries.

Fifty years ago tree planting was a subject rarely considered by the masses. But during the past ten or twenty years it has engrossed the attention of our statesmen and legislation recommending the planting and the proper care of trees has already become law in almost every state of the union. The beneficial effects resulting from systematic tree planting in the older states might easily be secured for the school districts of Montana. Well directed efforts on the part of the people of each and every county would result in adorning their school grounds and highways with healthy growing trees suited to their different soils and climatic conditions. Beautifying our school grounds, as we remarked in our last manual, beautifying our home premises, our roads and highways, and improving them by planting trees, by caring for their growth and development, are the objects of this manual.

Nothing particularly new or original occurs herein. We are, however, indebted to educators in other states for information relating to Arbor Day and its observance.

In this manual we have freely used their thoughts and ideas for the information of the people of Montana, under the impression that whatever their publications contain relating to Arbor Day ought to be scattered broadcast and thus become the common knowledge of all, to be used by all, to arouse an active interest in tree planting among the people of our state.

The Destruction of Our Forests.

The wholesale destruction of our great forests during the past thirty years has brought to the attention of the American people more emphatically than ever before the facts that the annual increase and growth of our forests must always equal the consumption of the timber taken from them, and that tree planting, the growth of trees, and the natural increase of the quantity of timber in them must always keep even pace with the demand for lumber and fuel made upon them, otherwise the time will be short indeed when our forest wealth will become completely exhausted. This is not a new question. Tree planting in European countries has from time immemorial been the custom of their people whenever and wherever the idea has forced itself upon them. Tree planting is now an American custom sanctioned by law in nearly every state of the union, and the preservation of our forests from useless and wanton waste will, we predict, be closely cared for in the future.

The destruction and loss of our forests in all parts of the country are unfortunate facts to which the attention of both our state and national governments has often been called. How to prevent the destruction of our forests, how to encourage and to increase tree planting and tree cultivation, are problems now before the American people for solution.

For the information of the readers of this manual we here quote freely from "Arbor Day, Its History and Observance," by N. H. Egleston, a pamphlet issued in 1896 from the U. S. Department of Agriculture.

From this source we learn that the commercial value of our forest products in 1896 was fifteen times that of the product of our gold and silver for the same year, while we also learn that during the year 1894 the entire value of all our mineral products was only about half the value of our forest products. We have no data at hand giving comparisons in value of these products during the past ten years. "Few persons realize," says N. H. Egleston, "the enormous and often wasteful consumption of our forests. That consumption annually amounts to 350 cubic feet per capita, as against 12 to 14 cubic feet per capita in Great Britain and about 40 cubic feet in Germany. The spread of population into the great treeless plains beyond the Mississippi has made a largely increased demand for lumber, and in response

to that demand we have been for years consuming our forests at a rate far beyond the supply furnished by their annual growth. The best estimates make the annual consumption of our forests for fuel and lumber chiefly, 25,000,000,000 cubic feet. To furnish this amount would require the produce of the annual growth of 1,200,000,000 acres of woodland, whereas our total forest area is less than 500,000,000 acres. It will therefore be noticed that more than half of our annual consumption is a draft by so much upon our forest capital, when we should be drawing from the forests only the amount of their annual growth, or the interest of that capital."

"How long," asks the same writer, "would it take a millionaire to become a bankrupt if he should be annually trenching upon his money capital at a like rate?" The reader is naturally led to ask, "How long at this rate of consumption will it be before our timber supplies will become exhausted?"

"With the enormous consumption of our forest trees now going on and rapidly increasing and the consequent diminution of our forest areas, the need of tree planting and tree cultivation becomes greater with every passing year, and the importance of Arbor Day constantly increases." Its great value is not so much in the number of trees as in the tree sentiment created and stimulated by the Arbor Day observances, which will be helpful in arresting the wasteful destruction of our forests and lead on in due time, it is to be hoped, to all private and public tree planting which our present and future interests may demand."

The above statements from so eminent an authority, startling as they seem, bring us face to face with the idea of a forest famine in the near future, and they give us time to reflect upon the dread consequences of such a famine and to provide against it.

How then to rehabilitate our forest areas, to invest them again with their former vegetation, to plant and to cultivate new forest areas, to till them, to care for them as thoroughly and systematically as the farmer cares for his corn or hay crop, to wait at least fifty years or longer in order to reap the first fruits of such labor, are now questions for consideration by our people, and by our state and national governments, questions, in fact, forced upon us by the constant destruction of our forest wealth during the past thirty years.

Arbor Day—Its Origin and History.

Arbor Day is the result of the legal sanction of customs long existing in Europe and in our own country.. "Tree planting had its origin away back in the days of antiquity." It has long been regarded as a science in many European countries, and is destined soon to become a well recognized science in this country.

The Arbor Day manuals and reports from many of our state superintendents contain a mass of facts showing the interest in tree planting now taken by our people in many sections of the union. From these reports it is interesting to note the hold which tree planting has upon the American people, and how local customs relating to tree planting have been enacted into laws.

State Superintendent T. C. Miller of West Virginia in his last lively Arbor Day manual informs us that "The custom of tree planting is an old one among the Germans, who, in the rural districts, practice a commendable habit of having each member of the family plant a tree at Whitsuntide, that the old Mexican Indians also plant trees on certain days of the year when the moon is full, naming them after their children, and that the ancient Aztecs are said to have planted a tree every time a child was born, giving it the name of the child."

N. H. Egleston in his "History of Arbor Day and Its Observance" writes as follows: "Hon. G. P. Marsh, our representative for many years at the courts of Italy and Turkey was the first to call attention in this country in an impressive way to the value and absolute need of trees. Mr. Marsh found the governments of Italy, Germany, and other countries making active endeavors and at great expense to rehabilitate their forests, to guard them from depredation, and actually cherishing them as among their most precious possessions. He also found the forests regarded as the most valuable crop which the ground can produce and every effort made to stimulate their growth to the utmost. He found schools, of a grade corresponding to our colleges, established for the special purpose of training men for the successful planting and cultivation of forests. He also found the growth of trees and their maintenance reduced to a science and the management of woodlands constituting one of the most important departments of state. The result of his observations was the publication of 'The Earth and Man,' and that interest-

ing chapter in it 'The Woods,' to which, more than to any source perhaps, we are indebted for the awakening of attention here to our destructive treatment of the forests, which actually threatens our material welfare.

During their colonial periods the people of New Hampshire and New York became alarmed by the inroads then made upon their forest preserves and enacted laws for their protection. During every decade of our history down to the close of the civil war tree planting in some form has engaged the attention of the people in many sections but no united action upon the subject of tree planting was ever resorted to. All are familiar with the well known "timber culture act," now repealed, making a free gift of public lands to the successful planter of forest trees on one fourth of his entry. How to protect our forests from wanton depredation and waste, how to increase their growth, how to arouse public sentiment in all forestry matters, when to plant trees, where to plant them, the kind to plant, and how to cultivate them have during the past thirty years often been considered in congress and before the American Association for the Advancement of Science. Our forests have been in a large degree destroyed. We can do much toward renewing them. Legislation both state and national is needed for this purpose. Every citizen can give a word of support to effect that end.

"Arbor Day is Nebraska's gift to the States of the Union." "To the Hon. J. Sterling Morton of Nebraska," says State Superintendent Hineman of Arkansas, "is due the credit for having first called direct attention to the subject in this country. The treeless plains of the West seemed to make a direct appeal to him. By his effort the 10th day of April, 1872, was adopted as Arbor Day in his state, and on that day more than 1,000,000 trees were planted. Since that time the number has increased to over 700,000,000, and that in a state on whose grassy plains scientists declared trees would not grow, and the few specimens to be found were confined to the water courses of the state. Thus was a great region, forming at one time a part of the Great American Desert, transformed in less than twenty years into a beautiful territory, adorned with trees and shrubs of almost endless variety." So contagious was the spirit of tree planting and Arbor Day observance originating in Nebraska in 1872 that in the course of the next twenty years or in 1892 every state and

territory in the Union except Delaware, Utah and Indian Territory, had enacted laws relating to tree planting and the observance of Arbor Day.

The American people are wonderfully resourceful and furiously energetic in the matter of recovering lost wealth. They are even now only beginning to understand and to comprehend the enormous forest waste and forest consumption of the past. They have always known that, to preserve their bank accounts, they must spend each year never more than the interest accruing upon them, and they are now fast learning that the best way to preserve their forest trees is to take from them for timber and for fuel a quantity never greater than their annual growth. It has taken them a full century to learn this fact and to comprehend its full meaning. The protection and preservation of our forests are questions for special consideration by our state and national governments, and we are optimistic enough to predict that the next fifty or one hundred years will witness tree planting, tree culture, forest preservation, and forest legislation upon a scale and at a rate equal and possibly superior to everything of the kind ever known and witnessed in Europe. The experience of the past century has taught our people lessons in forest preservation from which they will profit in the future. It means that our forests will again recover their former splendor and wealth. It means that laws rigid even as any now observed in European countries will be enacted to encourage tree planting and tree culture, and to protect our forest areas from the depredations formerly practiced upon them.

Law Creating Arbor Day.

For the purpose of advancing the interests of tree planting and arboriculture in this state, the third Tuesday in April is hereby designated as Arbor Day, and it is the duty of the Governor to annually make his proclamation setting apart that day for the planting of trees and for beautifying homes, cemeteries, highways, public grounds and landscapes, and the teachers in the public schools must on that day instruct the pupils as to the importance of tree planting and give practical lessons in landscape gardening.

Proclamation by the Governor.

Obedient to a sentiment that has grown out of experience since the passage of the original act, the legislative assembly has provided that the third Tuesday of April of each year shall be known throughout the state as Arbor Day—"for the planting of trees and for beautifying homes, cemeteries, highways, public grounds and landscapes."

I therefore designate Tuesday, April 16, 1907, as Arbor Day, and declare the same to be a legal holiday. Let the people of the State give general observance to the day, and by the planting of trees and shrubs and vines and the further beautifying of their homes attest more strongly the splendid civic pride that is bestirring itself to such noble purpose in every portion of the commonwealth.

Let none be deterred by any false pride from his duty to himself and to the citizenry of the years to come, for surely man can set himself no higher task than that which promises to give him and those about him higher hopes, a broader outlook and a cheerier, more wholesome life within—and these are some of the things that must grow out of an earnest observance of Arbor Day.

Let the teachers of the public schools impress upon their pupils the value of tree planting and arboriculture, and instill into the minds of these men and women of the future the knowledge that in the final analysis the best citizen is that man who does most toward the betterment and the brightening of the lives of those about him. Not every one may be able to plant a tree; and yet there will be some civic duty that each may perform which will add its quota to the sum total and give the doer the satisfaction that comes to him who does his duty to himself, to his neighbor, and to his state.

In Witness Whereof I have hereunto set my hand and caused the great seal of the state of Montana to be affixed.

Done at the city of Helena, the capital, the sixteenth day of March, in the year of our Lord one thousand nine hundred and seven, of the independence of the United States the one hundred and thirty-first, and of the state of Montana the eighteenth.

J. K. TOOLE, Governor.

By the Governor:

A. N. YODER, Secretary of State.

The Observance of Arbor Day.

To the School Trustees, Superintendents, Teachers and People of Montana:

I trust you all have read the Governor's recent proclamation relating to the observance of Arbor Day. The governors of all the states have issued, or are about to issue, their Arbor Day proclamations. All of these proclamations are interesting, because they show that our state executives during the past decades have unconsciously become united in urging upon the people the necessity of observing Arbor Day by planting trees for the future benefit and welfare of state and nation. Recommendations relating to tree planting upon a national scale would have been unheeded and possibly ridiculed fifty years ago. Now Arbor Day has become the law of the land. Such is the contrast in public opinion resulting from the constant destruction of our forests.

Our forests, like the buffalo herds of two generations ago, tend to vanish and to disappear before the march of civilization. Special days for the observance of special subjects have long been notable features in our schools. All of these subjects contain lessons of interest and importance to our pupils, their parents, and teachers, but none of these special days have more of future interest connected with them than Arbor Day. Planting trees for future generations is the end, aim and object of this day. Its particular value is for the future and not for the present to realize.

Ex-Gov. Poynter of Nebraska expressed the sentiment of us all when he said, "Let each school boy plant at least one tree which may be a shade for his noon-time of life. Let every young man plant a tree which may be a comfort in his after years. Let every man of middle life plant a tree which may grow into a monument of his foresight when his other work is forgotten. Let all our people give up the day to tree planting. Plant shade trees. Plant ornamental trees. Plant fruit trees. Beautify the plains with trees. Lay aside the cares of every day business and engage in a work which shall render our already beautiful state more beautiful and more desirable." We fully endorse these sentiments. They have the right ring to them. They are at once, stirring, forcible, practical. They appeal to every lover of nature, every citizen, every teacher, every school girl and boy,

Arbor Day is too often made a convenient season for clearing up the school grounds and yards, for repairing the walks and fences, for trimming the hedges, shrubs and trees, and for carting off the unsightly quantities of debris always collecting thereon. Such work is always necessary, but it does not result in tree planting. We suggest to you to have all this work done before Arbor Day arrives, so that Arbor Day itself can be entirely devoted to tree planting.

How to prepare the ground for the trees, the kind of trees to plant, how to care for them and to cultivate them, are all matters for the people of each school district to consider and to plan for. Men trained to every kind of craft and occupation are comparatively easy to find.

Tree planting, however, is often regarded as a new occupation requiring a new kind of skilled labor to perform it, hence trained tree planters are few indeed and hard to find. The subject of "forestry" together with "agriculture," will doubtless be taught in our schools in the near future. Tree planting will take care of itself when the school children have that subject thoroughly taught to them.

In the near future any agricultural college will be deficient and behind the times unless its teaching force contains a professor of arboriculture, and unless this science is given a prominent place in its course of study.

Much depends upon the teacher or trustees leading in this work. The duty of performing it rests largely with the pupils. The responsibility of continuing it and making a success of it rests with the pupils and the patrons. Fix upon some definite plan for the practical observance of Arbor Day and then work to execute it. Let us remember that a few trees, properly selected, planted, and cultivated this year, a few more next year, and still more during each one of the next ten years, will establish the custom of tree planting in every district.

I urge upon you all to observe in some practical form the letter and spirit of the Governor's proclamation. In so doing many of our treeless school lawns and unsightly backyards will be converted into places of comfort, pleasure, and cheer.

W. E. HARMON,

Superintendent of Public Instruction.

Helena, Mont., March 25, 1907.

Superintendent's Letter to the School Children.

Helena, Montana, March 19, 1907.

Dear Girls and Boys of Montana:

Another year has come and gone. A year ago I addressed you on Arbor Day and tried to interest you in still further beautifying your school grounds and home surroundings. In my visits last year I saw many manifestations of your interest in making more sightly and more desirable your school grounds. You not only planted trees and shrubs, but you cared for them the entire season. The results of your thought and care will in the near future present to the eye of the visitor and traveler shaded walks, velvet lawns, and beds of the most beautiful flowers. This diversion from your regular studies for a day will help you to see life with a broader vision; this communion with nature ever leads to nobler thoughts and better deeds. As you view the budding trees with the bright plumaged songster in its branches you must be brought to realize that you live in a beautiful land, the freest and best man has ever known. The girl and boy of humble parentage may in this land have their talents recognized. I trust this year, as last, you will where you see the unsightly, make it sightly, where you find the treeless yard strive to grow thereon at least one tree, so that in after years you may have a living witness to your endeavors. Plant trees, shrubs, and flowers, for, as Holmes well says, "There is no spot on earth which may not be made more beautiful by the help of trees and flowers."

Cordially yours,

W. E. HARMON,
Superintendent of Public Instruction.

Hints for Planting—The Montana Agricultural Experiment Station.

Bozeman, Mont., March 19, 1902.

The object of this article will be to help those who intend planting ornamental trees and shrubs, in selecting the varieties best adapted to the peculiar conditions found in this state, and to give an outline of the methods which have been found best for the planting and subsequent care of trees and shrubs.

The tree planters will find that they have many adverse conditions to contend with, and of course no one will expect the

same success that is attained by those in more favored locations, who succeed in growing trees although they are scarcely given a thought after once being placed in the ground. But here where the climatic conditions are somewhat opposed, the successful ones will be those who give their trees the cultivation and care that is essential to the best results.

The Buffalo Berry, Privet, Buckthorn, and Common Barberry are the most desirable shrubs for hedges in this state, being hardy and at the same time producing a good effect. Some of the evergreens notably the Arbor Vitae and Hemlock-Spruce are often used for this purpose, but where they are likely to come in contact with anything it is not best to use them as the branches are easily broken off while frozen.

The trees and shrubs found best suited for the different parts of this state, both on account of their hardiness and natural beauty are:—

1. Poplars: Carolina, Balm of Gilead, and Russian Poplar.
2. Maple: Silver Leaf and Cut Leaf.
3. Box Elder.
4. American Elm.
5. Mountain Ash.
6. Willow: Golden Russian and Red Willow.
7. White and Burr Oak.
8. White Birch and Cut Leaved Birch.
9. Colorado Blue Spruce.
10. Native Cedar.
11. Native Pines.

Of these the poplars, especially the Carolina poplar, will give the quickest returns and are easy to make grow, but where a longer lived tree is desired and one more to be admired, some of the other trees will answer the purpose better.

The American elm is one of the best trees that can be planted for beauty of form and growth, and the Mountain ash makes a very pretty specimen tree upon the lawn; but having a list of the hardy trees the reader can choose those that best suit his own fancy.

The shrubs that have been found hardy and worthy of trial are:
Syringias.

American and European Barberry.

Purple-leaved Barberry.

White-berried Privet.

Lilac.

Spiraea Van Houttii.

A number of the hardy roses if given some winter covering can be grown successfully and they greatly add to the beauty of a place during the flowering season.

If the trees are put out as single specimens they should not be planted so closely that they will touch, even when fully matured, and such varieties that have a characteristic beauty should be chosen for this purpose. The oak, elm and Colorado blue spruce are among the best trees for this purpose, being hardy and having a beauty of form or foilage that recommends them for specimen planting. If, however, they are grouped for a grove or dense shade, closer planting is advisable, and for road-side shade the distance should be such that room will be given for full development and yet give the desired shade.

For the larger growing trees as the oak and elm 40-50 feet apart is advisable; while for the birch, maple, poplars, etc., 30-40 feet is a good distance, unless a very quick shade is wanted, when they can be planted closer.

The land should be put in proper condition before any planting is done, and where the soil is not naturally rich fertilizers should be applied and worked into the soil.

The holes in which the trees are to be placed are dug before the trees are brought on to the ground and it is a good plan to put some fine rich soil into each hole before the trees are put in.

Dig the holes deep enough so that when the tree is in place it will be a little deeper than it was in the nursery, and wide enough to receive the roots without in anyway cramping or crossing them other than is natural.

Fill in around the roots with fine, moist, dirt, being careful to pack it down thoroughly, and leave no air spaces around the roots. Fill the hole to within 3 or 4 inches of the top and pack it hard as possible with the feet or a stick, and then throw the remaining dirt in loose. This will act as a mulch and prevent evaporation.

If the ground is moderately moist no water is necessary at planting time; but if inclined to be dry fill the hole with water 2 or 3 times before the tree is put in, allowing the water to soak away into the surrounding soil; or water can be applied to the tree before the hole is entirely filled, and this will settle the dirt

better around the roots, and also moisten the soil to a sufficient depth. It is a bad practice to apply the water after the hole is entirely filled as it will form a crust on top, and set up capillary action, thus quickly evaporating what soil moisture is in the ground and there is danger that the water will not reach the roots.

It makes no difference how carefully the trees were dug, some of the roots will be broken off, and to offset this the top will have to be pruned to give a proper balance; otherwise the top will evaporate more moisture than the roots can supply, thus insuring a weak and slow growing tree. Before planting all broken or lacerated roots should be cut off with a sharp knife, so as to induce a speedy growth of new roots. The necessity of pruning trees planted along drives and pathways so that they will not interfere with teams and pedestrians passing by is quite apparent.

After the trees are properly planted they should not be left to take care of themselves as is often the case; but good cultivation should be given during the growing season, keeping the ground free from weeds and in a fine pulverized condition.

Where irrigation is practiced, and this is necessary to the best results in most any part of the state, the water should be given in sufficient quantity to wet the ground thoroughly, and deep enough to reach the roots, otherwise irrigation is of little value. As soon as the ground will permit it after irrigation it should be cultivated and the surface soil pulverized. By doing this the moisture will be retained in the soil for a longer period and the roots will make a stronger growth.

By giving the trees plenty of water and good cultivation during the spring and summer months, they will make a normal year's growth in a comparatively short period, and by stopping irrigation as early as August 1st, the trees will ripen their wood and be better able to withstand the winter without injury.

Before the first hard frosts appear in the fall put a mulch of straw, manure or leaf mould around the trees; and this should not only be placed at the base of the tree but cover enough ground to protect all the lateral roots. In the spring after danger of severe frosts is past the mulch can be scattered over the ground or hauled off. Do not leave it around the tree during the growing season, as it tends to make the roots feed near the surface, thus exposing them to frosts and droughts.

In the case of small shrubs, that are in an exposed place, it is a good plan to put some kind of a covering over the whole plant, where the winters are exceptionally severe.

Evergreens can be transplanted from the forest with good success if it is done while the trees are in a dormant state and care is taken that the roots do not become dry. Once the resinous sap becomes congealed the trees are useless, and it is a waste of time to plant them.

When spring planting is intended the trees ought to be ordered in the fall and "heeled in" over winter. This insures against delays when planting time comes and the trees are more likely to be in a better condition than if ordered direct from the nursery in the spring.

Trees are "heeled in" by digging a trench large enough to receive the roots without unduly crowding them and placing the trees in it at an angle of about 45 degrees, with the tops leaning in the opposite direction from which the prevailing wind comes. Tamp fine dirt around the roots and see that they do not become dry. Where the winters are exceedingly cold and the position exposed, covering the whole tree is often practised, and when this is done they should be watched, that they do not heat in the pit. The covering ought to be taken off early enough in the spring so there will be no danger of the trees starting to sucker, as they are likely to do if left until the ground becomes warm.

Trees can be obtained from the following firms in this state:

The State Nursery Co., Helena, Mont.

The Missoula Nursery Co., Missoula, Mont.

T. T. Black, Whitehall, Mont., and probably others unknown to the writer.

R. W. FISHER,
Ass't Horticulturist.

Montana Agri. Exp. Sta.—From Arbor Day Manual, 1903.

Suggestive Program.

1. Music—Some familiar song.
 2. Reading of Governor's Proclamation.
 3. Reading—Origin of Arbor Day.
 4. Reading of Superintendent's Letter to Children.
 5. Song—Arbor Day March.
 6. Dialogue—My Favorite Tree.
 7. Recitation—The Schoolhouse Yard.
 8. Quotations—
 9. Essay—A More Beautiful School Yard.
 10. Song—We Love the Trees.
 11. Reading—School Gardening.
 12. Recitation—Woodman, Spare That Tree.
 13. Recitation—Plant a Tree.
 14. Essay—An Ideal Home.
 15. Address—Some invited visitor.
 16. Song—Springtime—Tune—Auld Lang Syne.
 17. Planting Trees and Shrubs.
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Arbor Day March.

(Air: Marching Through Georgia.)

Celebrate the Arbor Day
With march and song and cheer,
For the season comes to us
But once in every year;
Should we not remember it
And make the mem'ry dear;
Memories sweet for Arbor Day.

CHORUS.

Hurrah! Hurrah! The Arbor Day is here;
Hurrah! Hurrah! It gladdens every year.
So we plant a young tree on blithesome Arbor Day,
While we are singing for gladness.

Flow'rs are blooming all around,
Are blooming on this day;
And the trees with verdure clad,
Welcome the month of May,
Making earth a garden fair
To hail the Arbor Day,
Clothing all nature with gladness.

—Ellen Beauchamp.

Forest Culture in the United States.

Happily it is not too late to repair the damage that has been done in America by the devastation of our natural forests.. A regulation of the use of timber may be effected without injury to the legitimate lumber trade, and the replanting of forests as well as the establishment of artificial forests may undoubtedly be made profitable for private as well as public enterprise. Valuable trees grow quicker here, and to greater perfection than anywhere else. Nature has been lavish to this country. There are not more than 35 species and distinct varieties of native trees in France which attain a height of over thirty feet, not more than 65 in Germany; while there are over 150 in the upper Mississippi valley alone. All Europe possesses not a single native walnut tree. (The so-called English walnut is of Asiatic origin.) We have nine varieties of hickory and two of walnut proper. You may search all the world over in vain to find a sort of timber which in general usefulness can excel our hickory tree. Our walnut and oak varieties alone outnumber all the varieties of trees native to France and Spain.

Many millions of dollars of American capital are invested in various enterprises which require a much longer time to yield profit or income, and never pay nearly as well as systematic forest culture in proper localities. Great fortunes are risked in speculations in railroads which pay no dividends, in mines which enrich only the brokers who sell them, in lands and lots which never attain the expected increase of value.

But there is certainly no risk in forest culture. It is highly remunerative in all Europe where land is much higher in price. Our soil and climate produce a much larger variety of valuable timber than any European country. Our American hickory, black walnut, hard maple and wild cherry, for instance, have no equals in Europe. They excite the envy of European carriage makers, furniture men and manufacturers of tools.

Besides growing taller than in Europe, the most useful trees attain full development here in two-thirds of the time there required, an advantage which can not be overestimated. The governments of most of the German States, and of France, Austria and Italy, make forest culture an unfailing source of yearly revenue. They find it profitable to buy tracts of inferior lands at prices equal to those of our best farming lands, and to stock

them with timber. Many private owners, also, derive large incomes from their forests without ever diminishing the area of the same.

Forests are divided into as many equal parcels as the trees require years for development. They are cut in rotation, one each year, and immediately replanted after clearing. Only the better class of wheat or meadow lands net a greater average revenue in twenty-five years than well managed forests. This is a fact which at first sight may seem incredible, but which is easily understood when the yearly expenses of grain culture and the small outlay required for maintaining a forest are compared, and by taking into consideration the frequent failure of the grain crops, and the sure steadiness of the growth of trees.—Arbor Day Manual, 1903.

Montana's Flower.

Fair Montana! land of mountains,
Where vast herds of cattle roam;
Where are hid thy gold and silver—
Land of fertile valley home!

Thou art fitly represented
By the Rediviva bloom;
Sprung from root that lives tho' trodden,
Lives where others find their doom.

Rediviva! mountain floweret;
Month of roses sees thy birth.
Brightly decking vale and foothill
Truly thou art "gem of earth!"

Thou hast christened range of mountains,
Thou art valleys' lovely donor;
Let thy dainty rose-tint blossom
Be Montana's own "State Flower."

—F. A. Reynolds.

Plant Blessings.

Plant blessings, and blessings will bloom.
Plant hate, and hate will grow;
You can sow today, tomorrow shall bring
The blossoms that prove what sort of thing
Is the seed—the seed that you sow.

—Lucy Larcom.

State Flowers.

Idaho	Syringa
Vermont	Red Clover
Minnesota	Moccasin Flower
Alabama	Golden-Rod
Nebraska	Golden Rod
Oregon	Golden-Rod
Utah	Sego or Mariposa Lily
Maine	Pine Cone and Tassel
New York and Iowa	Rose
Montana	Bitter Root
Michigan	Apple Blossom
Oklahoma	Mistletoe
North Dakota	Wild Rose
Delaware	Péach Blossom
Rhode Island	Violet
Colorado	Columbine

Roadside Trees.

In Germany, France, Italy, and many other countries of Europe, as has been seen, large forests are planted annually under the direct supervision of the several governments; but besides these and private forests, trees are planted in great numbers by the roadsides. At present the total length of public roads of France is 18,750 miles, of which 7,250 miles are bordered with trees while 4,500 miles are at present being planted or will shortly be planted. On the remaining 7,000 miles the nature of the soil does not admit of tree growth. The number of trees already planted by the roadsides in France amounts to 2,878,603, consisting of elm, poplar, acacia, ash, plane, sycamore, and limes. In Germany many thousands of miles of roads are shaded by trees; in some parts they are forest trees, in others fruit trees.

All lovers of trees should hold in grateful remembrance the name of Hon. James Hillhouse, of New Haven, Connecticut, who beautified that city by planting with his own hand the elms that have since made it famous.

"I have always admired," says Whittier, "the good taste of the Sokoki Indians around Sabago Lake, who, when their chief died, dug around a beech tree, swaying it down, and placed his body in the rent, and then let the noble tree fall back into its original place, a green and beautiful monument for a son of the forest."—Arbor Day Manual, 1903.

My Favorite Tree.

(If possible, let each pupil carry a branch of the tree he describes.)

First Pupil—

“I speak for the elm. It is a noble tree. It has the shape of a Greek vase and such rich foliage running down the trunk to the very roots, as if a vine were wreathed about it.”

Second Pupil—

“My favorite is the maple. What a splendid cupola of leaves it builds up into the sky. And in autumn its crimson is so rich one might call it the blush of the woods!”

Third Pupil—

“The birch is a tree for me. How like a shaft of ivory it gleams in the daylight woods! How the moonlight turns it into pearl!”

Fourth Pupil—

“What a tree is the oak! First a tiny needle, rising toward the sun, a wreath of green to endure for ages. The child gathers the violet at its foot; as a boy he pockets the acorns; as a man he looks at its towering heights and makes it the emblem of his ambition.”

Fifth Pupil—

“The oak may be king of the lowlands, but the pine is king of the hills. There he lifts his haughty head like a warrior and when he is roused to meet the storm, the battle cry he sends down the wind is heard above all the voices of the greenwood.”

All—

Hail to the trees!

Patient and generous, mothers of mankind;
Arching the hills, the minstrels of the wind,
Spring's glorious flowers and summer's balmy tents.
A sharer in man's free and happier sense.
The trees bless all, and then, brown-mantled, stand,
The sturdy prophets of a golden land.

—Selected.

THE SCHOOLHOUSE YARD.

(May be used as an exercise for seven pupils, or as a recitation by one.)

1.

The schoolhouse yard was so big and bare,
No pleasant shadow nor leafy trees;
There was room enough, and some to spare,
To plant as many as ever you please.

2.

So first we set there a little pine,
For the wind to play its tunes upon,
And a paper birch, so white and fine,
For us children to write our secrets on.

3.

Then two little elms to build an arch,
Right over the gate when they grow up tall,
And a maple for tiny blooms in March,
And scarlet leaves in the early fall.

4.

A cedar tree for its pleasant smell,
A mountain ash for its berries bright,
A beech for its shade and nuts as well,
And a locust tree for its blossoms white.

5.

Then last we planted an acorn small,
To grow in its time a sturdy oak;
And somehow it seemed to us children all
That this was the funniest joke.

6.

For sweet Miss Mary smiling said,
"The other trees are your very own,
But this little oak we will plant instead
For your grandchildren, and them alone."

7.

I wonder now if the little folk
That come in the days that are to be,
To frolic under the future oak,
Will be as merry and glad as we.

All—

And if they will plant their elm and beech
As we do, just in the selfsame way,
And sing their chorus and speak their speech
And have such fun upon Arbor Day.

—Elizabeth Howland Thomas, in the Youth's Companion.

WHY WE KEEP ARBOR DAY.

(For seven children. As they take their places upon the stage,
those in seats recite the first stanza.)

Trees of the fragrant forest,
With leaves of green unfurled,
Through summer's heat, through winter's cold,
What do you do for our world?

First—

Our green leaves catch the raindrops
That fall with soothing sound,
Then drop slowly, slowly down,
'Tis better for the ground.

Second—

When rushing down the hillside,
A mighty freshet forms,
Our giant trunks and spreading roots
Defend our happy homes.

Third—

From burning heat in summer,
We offer cool retreat,
Protect the land in winter's storm
From cold, and wind, and sleet.

Fourth—

Our falling leaves in autumn,
By breezes turned and tossed,
Will make a deep sponge carpet warm
Which saves the ground from frost.

Fifth—

We give you pulp for paper,
Our fuel gives you heat,
We furnish lumber for your homes,
And nuts and fruit to eat.

Sixth—

With strong and graceful outline,
With branches green and bare,
We fill the land all through the year
With beauty everywhere.

All—

So, listen, from the forest,
Each one a message sends
To children on this Arbor Day,
"We trees are your best friends."

—Primary Education.

ARBOR DAY GEMS.

1. "The best verses I have produced are the trees I have planted."

—Holmes.

2. "In fact there's nothing that keeps its youth,
So far as I know, but a tree and truth."

—Holmes.

3. "While I live, I trust I shall have my trees, my peaceful idyllic landscapes, my free country life—and while I possess so much, I shall own 100,000 shares in the Bank of Contentment."

—Ruskin.

5. "Now is the time to work if we are to be blessed and not cursed by the people of the twentieth and twenty-first centuries. The nation that neglects its forests is surely destined to ruin."

—Hon. Elizur Wright.

6. "Gifts that grow are best;
Hands that bless are blest;
Plant: Life does the rest!
Heaven and earth help him who plants a tree,
And his work its own reward shall be."

—Lucy Larcom.

7. "When we plant a tree we are doing what we can to make our planet a more wholesome and happier dwelling place for those who come after us, if not for ourselves."

—Holmes.

8. "The true basis of national wealth is not gold, but wood. Forest destruction is the sin that has caused us to lose our earthly paradise."

—Felix L. Oswald.

9. "I can think of no more pleasant way of being remembered than by the planting of a tree. Birds will rest in it and fly thence with messages of good cheer. It will be growing while we are sleeping, and will survive us to make others happier."

—Lowell.

10. "Keeping up a fit proportion of forests to arable land is the prime condition of human health. If the trees go, men must decay. Whosoever works for the forests works for the happiness and permanence of our civilization."

—Hon. Elizur Wright.

11. "And Nature, the old nurse, took
The child upon her knee,
Saying: Here is a story book
Thy Father has written for thee."

"Come wander with me," she said,
"Into regions yet untrod;
And read what is still unread
In the Manuscripts of God."

—Longfellow.

12. "Though we travel the world over to find the beautiful,
we must carry it with us or we find it not."

—Emerson.

13. "It never rains roses; when we want more roses we must
plant more trees."

—George Eliot.

14. "The best and highest thing a man can do in a day is to
sow a seed whether it be in the shape of a word, an act, or an
acorn."

—James Boyle O'Reilly.

WE LOVE THE TREES.

(Tune: "There's Music in the Air.")

We love the grand old trees,
With the Oak, their royal king,
And the Maple, forest queen,
We to her our homage bring;
And the elm with stately form,
Long withstanding wind and storm,
Pine, low whispering to the breeze,
Oh, we love the grand old trees!

We love the grand old trees,
The cedar bright above the snow,
The poplar straight and tall,
And the willow weeping low,
Butternut and walnut too,
Hickory so staunch and true,
Basswood blooming for the bees,
O, we love the grand old trees!

We love the grand old trees,
The tulip branching broad and high,
The beech with shining robe,
And the birch so sweet and shy,
Aged chestnuts, fair to see,
Holly bright with Christmas glee,
Laurel crown for victories,
O, we love the grand old trees!
O, we love the grand old trees!

—Ada S. Sherwood, in Journal of Education.

SCHOOL GARDENING.

Tree planting, Manual Training, Domestic Science, Business Instruction and School Gardening are slowly receiving the consideration which their importance has long merited. The practical side of life and the every-day demands made upon us are now more than at any time in our history forcing their way to the attention of our educators and are everywhere claiming recognition from them. We have already considered tree planting. Its necessity amounts to a demand upon congress and our state legislatures to protect our forests and to provide for their future growth and cultivation.

Manual Training has come to stay and to become a permanent part of our educational system. The various arts and crafts are closely allied to manual training. "Educate the eye and hand" is the simple text upon which this subject is based. No one questions its value and necessity as a part of every child's education. Yet manual training has had for years an aggressive, hard, uphill struggle to secure a permanent place in our common school courses of study.

Domestic science, now taught in all of our agricultural institutions, is at last receiving its long overdue recognition. Its practical value can hardly be estimated. It has had in many sections a more aggressive contest for recognition than manual training. It has, however, weathered all of the storms of opposition raised against it, and it is now everywhere meeting with favorable consideration from our leading educational institutions.

Business colleges have become firmly planted in all parts of the country. The times and needs of the people demanded them. They have long done work impossible for the average schools to perform. Their necessity and worth to every student are self-evident truths, and they need no advocates.

For a century past mathematics, literature, history, and the classics were the leading features of our schools while little or no attention was ever given to these five special branches above mentioned.

This is fast becoming an intense common-sense age in all things relating to a child's education. The ornamental in education is good, the practical is better. Give us both, but give us the latter in preference to the former if we are obliged to choose one of them. At the present time the bread and butter problems, the

industrial side of children's lives, their future welfare, and the every-day demands to be exacted from them in their coming years are now receiving a consideration never before accorded them. A combination of the ideal, the ornamental, and the practical systems of instruction will never be effected until these long neglected branches become a part of the regular work of our common schools. By giving these special branches fair and just consideration in order to promote the welfare of every child we shall in some degree be heeding Solomon's admonition, "Train up a child in the way he should go and when he is old he will not depart from it."

The American people have had their age of fads and nonsense in the school room, and they are now becoming a race of eminent and practical thinkers. They always welcome new features and new methods when practical, and they are equally as ready to cast off old features and old methods when no longer serviceable. What new feature, if any, should be introduced in our schools that will help our children to think more rapidly, sharply, wisely, and to the point, and will tend to develop their ideas along industrial, ornamental and practical lines? School gardening is the answer coming from a hundred different directions. This subject, quite new and comparatively unknown to the schools of our country, has for a long time been a part of the educational work in many European schools.

It is interesting to note that school gardening becomes a success in every locality where it has been introduced and taught by expert teachers. School gardening seems destined to expand and to grow in favor until it will become known in our schools as elementary agriculture. Even now it seems to be related to our common school courses of study much as the Agricultural College is related to our other educational institutions.

The questions raised in regard to school gardening by the people at large are: What does it amount to? What is its end, aim and purpose? What are the beneficial results to be secured from it? In short, will it pay to teach school gardening in our common schools as a part of their regular course of instruction?

The reports coming to this office from various sources contain valuable information relating to school gardening, and extracts from them we herein freely insert to inform the readers of this manual how school gardening is regarded at the present time

by many authorities as a part of every child's course of instruction.

What does it amount to? It teaches children the difference between gardening conducted in the usual haphazard manner too often characteristic of the farm and ranch, and gardening taught in the systematic, scientific manner by professional experts.—Arbor Day Manual of 1906.

What is its end, aim, and purpose? "School gardening teaches practical elementary lessons in mixing soils, sowing seeds, potting and shifting plants, transplanting trees, making hot beds, laying out and preparing ground for the raising of vegetables, in planting, trimming and cutting vines and shrubs, in the work of the greenhouse, repairing and painting sash, mixing and applying fungicides and insecticides, in budding, grafting, etc., etc."—Illinois Arbor and Bird Day Manual 1906.

What are the beneficial results to be secured from it? The children acquire a practical knowledge of gardening by doing the work of gardening. It increases and develops their power of observation. "It renders them quick to grasp ideas and to put them into action." "The country child learns the business-like, up-to-date methods of agriculture, gardening, and tree planting." "The nature of the soil, the importance of fertilization, the conditions essential to the growth of vegetables, flowers and trees, are all taught in a clear, practical, thorough manner in the school garden."—North Dakota Arbor Day Manual of 1906.

Will it pay to teach this branch in our common schools?

"School gardening teaches children in a systematic way how to prepare ground for plants, shrubs and seeds, how to care for them when growing, how to weed and to thin them out, how to keep the ground in proper condition, how to develop and to foster their growth unto maturity, in short how to secure the greatest good out of them."—Arbor Day Manual, 1906.

Supt. Peaslee, of the Lynn, Mass., public schools, in his last report says: "Normal schools are beginning to make work in the garden a part of the training for teachers.

"Our school garden work has been developed in a steady and rational way. Nothing has yet been found equal to the school garden as a center of interest to which the work of the school will so naturally and practically attach itself. For language, drawing, arithmetic, nature study, the school garden affords a

wealth of working material, the like of which can never be found in books."

The School Garden Leaflet of the Georgia School Improvement Club contains the following: "Every school in Georgia ought to have a garden; every school in the state may have one, and since the General Assembly has made agriculture one of the required subjects of the public schools, every school in the state must have one. There is no subject in the entire course of study which enriches school life more. It affords healthful exercise in the open air and tends to dignify labor. It furnishes a basis in the necessary study of soils, atmospheric conditions, plant and animal life and their relation to each other, for the study of the natural and physical sciences."

These questions, their answers, and the trend of public opinion all indicate the spirit and thought of the times. School gardening will in the future become a part of the work of our schools. "Coming events cast their shadows before."

WOODMAN, SPARE THAT TREE.

Woodman, spare that tree!
Touch not a single bough!
In youth it sheltered me
And I'll protect it now.
'Twas my forefather's hand
That placed it near his cot;
There, woodman, let it stand;
Thy ax shall harm it not.

That old familiar tree,
Whose glory and renown
Are spread o'er land and sea—
And wouldst thou hew it down?
Woodman, forbear thy stroke;
Cut not its earth-bound ties;
O, spare that aged oak
Now towering to the skies!

When but an idle boy
I sought its grateful shade;
In all their gushing joy
Here too my sisters played,
My mother kissed me here,
My father pressed my hand;
Forgive this foolish tear,
But let that old oak stand!

My heartstrings 'round thee cling,
Close as thy bark, old friend!
Here shall the wild bird sing,
And still thy branches bend.
Old tree, the storm still brave!
And, woodman, leave the spot;
While I've a hand to save.
Thy ax shall harm it not.

—George P. Morris.

WHAT THE TREES TEACH US.

First Pupil—

I am taught by the Oak to be rugged and strong
In defense of the right; in defiance of wrong.

Second Pupil—

I have learned from the Maple, that beauty to win
The love of all hearts, must have sweetness within.

Third Pupil—

The Beech, with its branches wide-spreading and low,
Awakes in my heart hospitality's glow.

Fourth Pupil—

The Pine tells of constancy. In its sweet voice
It whispers of hope till sad mortals rejoice.

Fifth Pupil—

The nut-bearing trees teach us that 'neath manners gruff,
May be found as "sweet kernels" as in their caskets rough.

Sixth Pupil—

The Birch, in its wrappings of silvery gray,
Shows that beauty needs not to make gorgeous display.

Seventh Pupil—

The Ash, having fibers tenacious and strong,
Teaches me firm resistance, to battle with wrong.

Eighth Pupil—

The Aspen tells me with its quivering leaves,
To be gentle to every sad creature that grieves.

Ninth Pupil—

The Lombardy Poplars point upward in praise,
My voice to kind Heaven they teach me to raise.

Tenth Pupil—

The Elm teaches me to be pliant, yet true;
Though bowed by rude winds, it still rises anew.

Eleventh Pupil—

I am taught generosity, boundless and free,
By the showers of fruit from the dear Apple tree.

Twelfth Pupil—

The Cherry tree, blushing with fruit crimson red,
Tells of God's free abundance that all may be fed.

Thirteenth Pupil—

In the beautiful Linden, so fair to the sight,
This truth I discern: It is inwardly white.

Fourteenth Pupil—

The firm-rooted Cedars, like sentries of old,
Show that virtues deep-rooted may also be bold.
—Helen O. Hoyt, in the Teacher's World.

SPRINGTIME.

Air—"Auld Lang Syne.

The winter storms have passed away,
And springtime now is here,
With sunshine smiling all around,
And heavens blue and clear.
The gifts of Nature brighten earth,
And Nature her garden gay;
They give a cheery greeting bright
On this, the Arbor Day.

The birds with gladsome voices sing,
Each its melodious lay,
And music swells each little throat
On this, the Arbor Day.
The trees put forth their greenest leaves
On this, the Arbor Day,
And welcome now the chosen tree
Which we shall plant to-day.

—Ellen Beauchamp.

PLANT A TREE.

He who plants a tree
Plants a hope.
Rootlets up through fibres blindly grope:
Leaves unfold into horizons free
So man's life must climb
From the clods of time
Unto heavens sublime.
Canst thou prophesy, thou little tree,
What the glory of thy boughs shall be?

He who plants a tree
Plants peace.
Under its green curtains jargons cease,
Leaf and zephyr murmur soothingly,
Shadows soft with sleep
Down tired eyelids creep,
Balm of slumber deep.
Never hast thou dreamed, thou blessed tree.
Of the benediction thou shalt be.

He who plants a tree,
Plants love;
Tents of coolness spreading out above
Wayfarers, he may not live to see.
Gifts that grow are best;
Hands that bless are blest;
Plant; life does the rest.
Heaven and earth help him who plants a tree,
And his work its own reward shall be.

—Lucy Larcom.

FAMOUS TREES.

Note to Teachers.—We suggest to you to allow your pupils to secure information relating to the trees below mentioned, and then to write short descriptions of them for the information of all the scholars and their parents.

1. The Treaty Elm of Philadelphia.
2. The Charter Oak of Hartford, Connecticut.
3. The Liberty Elm of Boston.
3. Washington's Elm at Cambridge.
5. The Burgoyne Elm at Albany, New York.
6. Perry's Willow on the shore of Lake Erie.
7. The Hamilton Trees of New York.

8. The Carey Sycamore.
 9. The Big Trees of California.
 10. The Apple Tree of Appomattox.
 11. The Tree from Napoleon's Grave.
 12. Logan's Elm.
 13. Shakespeare's Mulberry Tree.
 14. The Boabab Tree of the Cane Verde Islands.
 15. The Banyan Trees of India.
 16. The Cedars of Mt. Lebanon.
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SOME QUESTIONS AND ANSWERS.

Why did George III have such a mania for tree planting?

Why did Queen Victoria personally superintend the planting of more than 5,000 trees near London, and at places she visited?

Why has the Prince of Wales planted on public occasions so many trees at home and abroad?

Why are so many great arboreta and parks of vast extent maintained in all parts of Europe?

Why is every tree labeled with botanic and common name in public gardens, parks, and even public avenues?

Why are the elements of forestry and horticulture taught in the common schools of Germany.

Why are so many forestry schools supported in every part of continental Europe?

In all cases the purpose is to create a public sentiment favorable to tree planting, and to familiarize the people with the best species and varieties of trees and the best modes and methods of planting and managing them.

During the past century the rulers and educators of Europe, from the king down to the common school teacher, have kept before the people these few primary facts in regard to trees, that our commerce, home shelters, furniture, machines, landscape effects, depend upon tree planting and forest preservation.

Only this constant education of the masses would permit the maintenance of the rigid forest laws of nearly all continental Europe.

It has been said that the Europeans may disagree on questions of politics, religion, etc., but on the forestry question, from prince to peasant, they agree that at least 33 1-3 per cent of the entire

area of the country must be kept in timber blocks properly distributed for economic uses and climatic effect.

This public education also renders possible the system of fruit trees by the roadside, the beautiful little park and flower garden at the railway station and tree and shrub groupings and effects everywhere, such as we cannot reach with our present public sentiment.

To us this work is new. With a forest wealth in extent and number of value species not excelled on earth, the first moves in the occupation of the continent have been in the way of wasteful forest destruction.

But a new era is dawning. In many ways that cannot here be enumerated we have commenced the good work which a century of growth has made nearly complete in parts of Europe.—J. L. Budd, Ames, Iowa.—Arbor Day Manual of 1903.

OUR THREE FAVORITES.

The oak is a strong and stalwart tree,
And it lifts its branches up
And catches the dew right gallantly
In many a dainty cup.
But the world is brighter and better made,
Because of the woodman's stroke,
Descending in the sun or falling in shade,
On the sturdy form of the oak.

The elm is a kindly, good tree,
With its branches bending low;
The heart is glad when its form we see,
As we list to the river's flow.
Ay! the heart is glad and the pulses bound,
And joy illumines the face
Whenever a goodly elm is found,
Because of its beauty and grace.

The maple is supple, and lithe, and strong,
And claimeth our love anew,
When the days are listless, and quiet, and long,
And the world is fair to view.
And later—as the beauties and graces unfold—
A monarch right royally drest,
With streamers aflame and pennons of gold,
It seems of all the best.

—Selected.

A SECRET.

"You think I am dead,"
The apple tree said,
"Because I've neer a leaf to show;
Because I stoop,
And my branches droop,
And the dull gray mosses over me grow!
But I'm alive in trunk and shoot.
The buds of next May
I fold away—
But I pity the withered grass at my root."

"You think I am dead,"
The quick grass said,
"Because I have withered in stem and blade!
But under the ground
I am safe and sound,
With the snow's thick blanket over me laid.
I'm all alive and ready to shoot,
Should the spring of the year
Come dancing here—
But I pity the flower without branch or root."

"You think I am dead,"
A soft voice said,
"Because not a branch or a root I own!
I never have died
But close I hide
In a plummy seed that the wind has sown.
Patient I wait through the long winter hours;
You will see me again—
I shall laugh at you then
Out of the eyes of a hundred flowers."

—Selected.

HOW THE LEAVES CAME DOWN.

"I'll tell you how the leaves came down,"
The great tree to his children said:
"You're getting sleepy, Yellow and Brown,
Yes, very sleepy, little Red."

"Ah," begged each silly, pouting leaf,
"Let us a little longer stay;
Dear Father Tree, behold our grief;
'Tis such a very pleasant day,
We do not want to go away."

So just for one more merry day
To the great tree the leaflets clung,
Frolicked and danced and had their way,
Upon the autumn breezes swung,
Whispering, all their sports among.

"Perhaps the great tree will forget,
And let us stay until the spring,
If we all beg, and coax, and fret."
But the great tree did no such thing;
He smiled to hear their whispering.

"Come, children all, to bed," he cried,—
And ere the leaves could urge their prayer,
He shook his head, and far and wide,
Fluttering and rustling everywhere,
Down sped the leaflets through the air.

I saw them on the ground, they lay,
Golden and red, a huddled swarm,
Waiting till one from far away,
White bedclothes heaped upon her arm,
Should come to wrap them safe and warm.
The great bare tree looked down and smiled,
"Good night, dear little leaves, he said;
And from below each sleepy child
Replied, "Good night," and murmured,
"It is so nice to go to bed!"

TEACHING.

One impulse from a vernal wood
May teach you more of man,
Of moral evil and of good,
Than all the sages can.

—Wadsworth.

SYMPATHY WITH TREES.

I care not how men trace their ancestry,
To ape or Adam; let them please their whim;
But I in June am midway to believe
A tree among my far progenitors,
Such sympathy is mine with all the race,
Such mutual recognition vaguely sweet
There is between us.

—Lowell.

BLESSING FOR THE TREE PLANTER.

O painter of the fruits and flowers!
We thank Thee for thy wise design,
Whereby these human hands of ours
In nature's garden work with Thine.

* * * * *

Give fools their gold and knaves their power;
Let fortune's bubbles rise and fall;
Who sows a field or trains a flower
Or plants a tree is more than all.

For he who blesses most is blest;
And God and man shall own his worth
Who toils to leave as his bequest
An added beauty to the earth.

And, soon or late, to all who sow,
The time of harvest shall be given;
The flower shall bloom, the fruit shall grow,
If not on earth, at last in heaven.

—Whittier.

FOREST HYMN.

The groves were God's first temples. Ere man learned
To hew the shaft, and lay the architrave,
And spread the roof above them—ere he framed
The lofty vault, to gather and roll back
The sound of anthems; in the darkling wood,
Amidst the cool and silence he knelt down,
And offered to the Mightiest solemn thanks
And supplication. For his simple heart
Might not resist the sacred influences
Which from the stilly twilight of the place,
And from the gray old trunks that high in heaven
Mingled their mossy boughs, and from the sound
Of the invisible breath that swayed at once
All their green tops, stole over him and bowed
His spirit with the thought of boundless power
And inaccessible majesty. Ah, why
Should we, in the world's riper years, neglect
God's ancient sanctuaries, and adore
Only among the crowd, and under roofs
That our frail hands have raised? Let me, at least,
Here, in the shadow of this aged wood,
Offer one hymn—thrice happy if it find
Acceptance in His ear.

—Bryant.

AN APRIL DAY.

When the warm sun, that brings
Seedtime and harvest, has returned again,
'Tis sweet to visit the still wood, where springs
The first flower of the plain.

From earth's loosened mold
The sapling draws its sustenance, and thrives;
Though stricken to the heart with winter's cold,
The drooping tree revives.

The softly warbled song
Comes from the pleasant woods, and colored wings
Glance quick in the bright sun, that moves along
The forest openings.

Sweet April! many a thought
Is wedded unto thee, as hearts are wed;
Nor shall they fail, till, to its autumn brought,
Life's golden fruit is shed.

—Longfellow.

STEADFASTNESS.

A little of thy steadfastness,
Rounded with leafy gracefulness,
Old oak, give me—
That the world's blasts may round me blow,
And I yield gently to and fro,
While my stout-hearted trunk below
And firm set roots unshaken be.

—Lowell.

THE BOBOLINK.

Gladness on wings, the bobolink is here;
Half hid in the tip-top apple blossoms he swings,
Or climbs against the breeze with quivering wings,
Or, giving way to it in mock despair,
Runs down through a brook o'laugther through the air.
—James Russell Lowell.

SONG OF CLOVER.

I wonder what the Clover thinks,—
Intimate friend of Bob-o'links,
Lover of Daisies slim and white,
Waltzer with Buttercups at night;
Keeper of Inn for traveling Bees,
Serving to them wine-dregs and lees,
Left by the Royal Humming Birds,
Who sip and pay with fine-spun words;
Fellow with all the lowliest,
Peer of the gayest and the best;
Comrade of winds, beloved of sun,
Kissed by the Dew-drops, one by one;
Prophet of Good-luck mystery
By sign of four which few may see;
Symbol of nature's magic zone,
One out of three, and three in one;
Emblem of comfort in the speech
Which poor men's babies early reach;
Sweet by the roadsides, sweet by rills,
Sweet in the meadows, sweet on hills,
Sweet in its white, sweet in its red,—
Oh, half its sweetness cannot be said;—
Sweet in its every living breath,
Sweetest, perhaps, at last, in death!
Oh! who knows what the Clover thinks?
No one! unless the Bob-o'links!

—Saxe Holm.

SPRING.

Now fades the last long streak of snow ;
Now bourgeons every maze of quick
About the flowering squares, and thick
By ashen roots the violets blow.

Now rings the woodland loud and long,
The distance takes a lovelier hue,
And drowned in yonder living blue
The lark becomes a sightless song.
Now dance the lights on lawn and lea,
The flocks are whiter down the vale,
And milkier every milky sail
On winding stream or distant sea.

Where now the sea-mew pipes, or dives
In yonder greening gleam, and fly
The happy birds that change their sky
To build and brood, that live their lives.

From land to land ; and in my breast
Spring wakens too ; and my regret
Becomes an April violet,
And buds and blossoms like the rest.

—Alfred, Lord Tennyson.

THE LARCH AND THE OAK.

“What is the use of thee, thou gnarled sapling?” said a young larch-tree to a young oak. “I grow three feet in a year, thou scarcely so many inches ; I am straight and taper as a reed, thou straggling and twisted as a loosened withe.” “And thy duration,” answered the oak, “is some third part of man’s life and I am appointed to flourish for a thousand years. Thou art felled and sawed into paling, where thou rottest and art burned after a single summer ; of me are fashioned battleships, and I carry mariners and heroes into unknown seas.”

—Thomas Carlyle.

